

REMARKS

Favorable reconsideration and allowance of this application are requested.

1. Interview Summary

At the outset, applicants' undersigned attorney wishes to express his sincere appreciation for the time and careful consideration of the issues provided by Examiner Muromoto during the telephonic interview of February 3, 2009. It is believed that the interview materially advanced prosecution of this application for which the applicants are grateful.

The substance of the interview is believed to be fully stated in the Examiner's Interview Summary record which was mailed on February 6, 2009. Thus, further comment on the substance of such interview is believed to be unnecessary.

2. Discussion of Amendments

By way of the amendment instructions above, each of the independent claims 1 and 9-11 have been revised so as to emphasize that the porous separating film is "non-fibrous" (i.e., is not formed of fibers). Support for such a passage can be found at page 6, lines 8-15 as well as the disclosures of EP 0184392 and EP 0504954 cited on page 5, line 29 as being representative of the manufacturing methods that may be employed to form the separating films usable in the present invention.

Following entry of this amendment, claims 1-11 will remain pending herein for consideration, of which claims 1 and 9-11 are in independent format.

3. Response to 35 USC §102(b) Rejection

The Examiner continues to assert that claims 1-11 are anticipated under 35 USC §102(b) by Harpell et al (USP 4,613,535). Applicants again respectfully disagree.

The Examiner asserts that Harpell et al discloses that the separating film is an elastomeric film matrix; or face sheet layers of highly orientated ultra-high molecular weight polyethylene **fibers** in epoxy resin (page 4, 1st paragraph of Official Action). As was explained during prior prosecution, the fiber/resin matrix material of Harpell et al cannot be read as being commensurate with the porous separating films of the present invention. This distinction has been further clarified by the claim amendments presented above whereby the porous separating films are required to be "non-fibrous".

The fiber/resin matrix material of Harpell et al likewise does not possess a porosity of between 40 and 90 %. In this regard, there is attached hereto as Exhibit A a mathematical calculation of porosity based on the materials described in Example 1 of Harpell et al. As noted, the porosity of the matrix sheet is only 3.35% -- well below the lower limit of porosity of 40% provided by the separating films employed in the present invention.

Thus, for these reasons and the reasons already expressed during prosecution to date, applicants again submit that Harpell et al cannot anticipate the presently claimed invention under 35 USC §102(b).

Nor can Harpell et al be considered to be suggestive of the presently claimed invention so as to render the same "obvious" under 35 USC §103(a). In this regard, the Examiner is invited to again review the evidence in the originally filed specification. In this regard, the Examiner's attention is directed specifically to the data in Table 1 on page 14 of the specification with regard to Comparative Experiment A and Example 1. As shown, superior ballistic performance ensues when separating films having a porosity of between 40% to 90% are employed in a ballistic article in accordance with the present invention (Example 1, SEA = 350 J.m²/kg) versus a comparable ballistic article wherein the separating films are non-porous (Comp. Exp. A, SEA = 211 J.m²/kg).

As evidence that the film employed in Comparative Experiment A was in fact non-porous, there is attached as Exhibit B a datasheet for the film employed therein.¹ In this regard, it will be noted that the specification discloses that the areal density of such a film as employed in Comparative Experiment A was 7 g/m^2 whereas the data sheet of Exhibit B reveals that the value of the areal density is 6.5 g/m^2 . Through the thickness of 7 micron and the areal density (6.5 g/m^2), one can calculate the density of the film to be 928 kg/m^3 (i.e., $0.007\text{m}/6.5 \text{ g/m}^2$). From the literature, it is known that the density of low density polyethylene (depending on type) is between $920\text{-}940 \text{ kg/m}^3$. Therefore, the film employed in Comparative Experiment A is indeed non-porous. Otherwise, the calculated density of the film employed in Comparative Experiment A would be substantially less than the density of known low density PE films found in the literature.

This evidence of superior ballistic performance is submitted to be quite telling of the *unobviousness* of the presently claimed invention which employs separating films having a porosity of between 40% and 90%. Indeed, it is suggested that an ordinarily skilled person would not seek to actually *decrease* the density of a material by increasing its porosity when designing an article to defend against ballistic projectiles. As such, applicants suggest that the presently claimed invention is both novel and unobvious over the applied Harpell et al reference.

Withdrawal of all rejections based on Harpell et al is therefore in order.

4. Comments Regarding Double Patenting

The Examiner has inferentially referenced potential "double patenting" issues with respect to copending applications Serial Nos. 11/714,606; 11/1007,330 and 10/532,807. Since no rejection was actually advanced by the Examiner, further

¹ As a point of reference, there is also attached as Exhibit C a product data sheet for the porous film employed in Example 1 according to the present invention.

comment on such issue appears unnecessary at this time. However, the applicants' review of the claimed subject matter in the referenced copending applications reveals that the feature of the porous separating film as defined in the pending claims of the subject application would in fact render such claims patentably distinct over the pending claims of the referenced applications for at least the above-noted reasons. Thus, a subsequent rejection of the claims under the doctrine of "double patenting" would be inappropriate.

4. Fee Authorization

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

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